

## West Nile Virus Newsletter

Zoonotic Disease Program, Washington State Department of Health

October 5, 2005 Volume 3, Issue 14

#### **Purpose**

To keep our partners and other interested entities informed about West Nile virus (WNV)

#### In This Issue

WNV found in Yakima County horse

Antibody's success against WNV surprise scientists

Journal articles from CDC's *Emerging Infectious Diseases* 

National, northwest, and state surveillance

#### **Previous Issue**

Dead bird and another mosquito pool test positive for WNV

South Dakota getting hit hard this year

Mosquito spraying in New Orleans

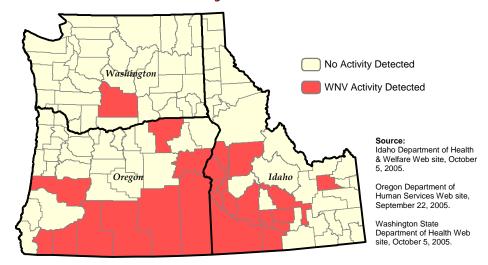
National, northwest, and state surveillance

View the <u>September 22<sup>nd</sup></u> WNV Newsletter

#### Subscribe, Submit Articles, Suggestions

Contact Ben Hamilton benjamin.hamilton@doh.wa.gov

### West Nile virus activity in the Northwest



<u>Washington:</u> One horse, one bird and two mosquito pools from Yakima County have tested positive for WNV. <u>Idaho:</u> Thirteen humans, one-hundred and six horses (<u>press release</u> on eastern Idaho WNV positive horse), seventeen mosquito pools, fourteen birds, and one dog have been infected. <u>Oregon:</u> Seven humans, fifteen horses, fourteen birds, eight mosquito pools, and four sentinel chickens have tested positive for WNV.

### West Nile virus found in Yakima County horse

OLYMPIA – West Nile virus has been confirmed in a 27-year-old horse in Yakima County, the state Department of Agriculture announced today (Sept. 23). The Prosser-area mare was tested after she became unsteady and developed signs of central nervous system infection. The horse was not vaccinated for West Nile virus.

This is the first reported case of West Nile infection in a horse where the infection was acquired in Washington state this year. The other announced equine cases involved infections that were contracted out of state.

The positive test results were reported today by the Washington Animal Disease Diagnostic Laboratory at Washington State University in Pullman.

Earlier this week, health officials in Oregon's Umatilla County announced a Milton-Freewater horse tested positive for the virus. In mid-September, the Benton County Mosquito Control District detected positive test results in mosquitoes collected in Yakima County, and the WSU lab last week confirmed a magpie infected with the disease, also in Yakima County.

#### WNV Web Resources

Washington State Department of Health www.doh.wa.gov/wnv

Centers for Disease Control and Prevention www.cdc.gov/ncidod/dvb id/westnile

US Geological Survey & CDC ArboNET maps http://westnilemaps.usgs.gov/index.html

Cornell University, Environmental Risk Analysis Program http://environmentalrisk.cornell.edu/WNV/

Washington State
University Cooperative
Extension
www.wnv.wsu.edu

Washington State
Department of
Agriculture
www.agr.wa.gov/FoodAn
imal/AnimalHealth/Disea
ses/WestNileVirus/defaul
t.htm

## Northwest Links Idaho Department of

Health & Welfare www.westnile.idaho.gov

Oregon Department of Human Services http://egov.oregon.gov/D HS/ph/acd/diseases/wnil e/survey.shtml

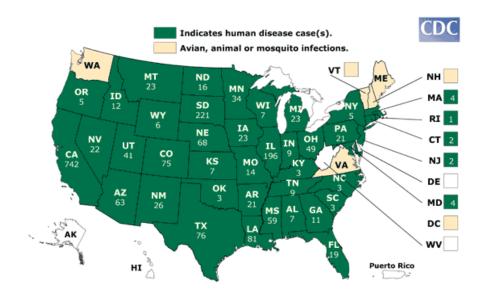
British Columbia Center for Disease Control www.bccdc.org

"This is a clear indication that West Nile virus is in our state and it's already amplified enough in mosquitoes and birds to spread the infection to horses," said Dr. Leonard Eldridge. "We have been anticipating this since it's been seen in neighboring states. The public and horse owners should take protective measures and avoid mosquito bites."

View the Department of Agriculture's news release at <a href="http://www.agr.wa.gov/News/2005/05-44.htm">http://www.agr.wa.gov/News/2005/05-44.htm</a>.

### West Nile virus activity in the United States

(Reported to CDC as of October 4, 2005)



As of October 4, 2005 a total of 41 states have published 2,016 human cases, compared with 1,865 cases from 39 states at this time in 2004.

National maps and data available at <a href="http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm">http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm</a>.

### Antibody's success against WNV surprise scientists

A monoclonal antibody that can effectively treat mice infected with West Nile virus has an intriguing secret: Contrary to scientists' expectations, it does not block the virus's ability to attach to host cells. Instead, the antibody somehow stops the infectious process at a later point.

"This was a complete surprise to us, but it gives us some very useful insights," says senior author Daved Fremont, Ph.D., associate professor of pathology & immunology and of biochemistry & molecular biophysics at Washington University School of Medicine in St. Louis. "Based on what we've learned, we are now developing therapeutic antibodies for related viruses that also are effective at stopping the process of infection after the virus attaches to host cells."

Continue reading this entire article at <a href="http://www.innovations-report.com/html/reports/life\_sciences/report-49860.html">http://www.innovations-report.com/html/reports/life\_sciences/report-49860.html</a>.

## DOH WNV Contacts

Toll Free Info Line
1-866-78VIRUS

Publication Requests
Cyndi Free
360-236-3384
cyndi.free@doh.wa.gov

Mosquito Surveillance Jo Marie Brauner 360-236-3064 jomarie.brauner@doh.wa.gov

Bird and Horse Surveillance Tom Gibbs 360-236-3060 tom.gibbs@doh.wa.gov

Aquatic Mosquito Control NPDES Permit Ben Hamilton 360-236-3364 benjamin.hamilton@doh.wa.gov

WNV in Humans Local Health Jurisdiction or DOH Communicable Disease Epidemiology 206-418-5500 or 877-539-4344

Media Response Assistance Donn Moyer 360-236-4076 donn.moyer@doh.wa.gov or Tim Church 360-236-4077 tim.church@doh.wa.gov

**News Releases and** 

Management Maryanne Guichard 360-236-3391 maryanne.guichard@doh.wa.gov

**WNV Program** 

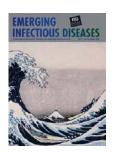
WNV Coordinator Dorothy Tibbetts 360-236-3361 dorothy.tibbetts@doh.wa.gov

#### Journal articles

Centers for Disease Control and Prevention, Emerging Infectious Diseases, Volume 11, Number 10 – October Issue

**Rapid West Nile Virus Antigen Detection,** N.A. Panella et al. <a href="http://www.cdc.gov/ncidod/eid/vol11no10/04-0394.htm">http://www.cdc.gov/ncidod/eid/vol11no10/04-0394.htm</a>

West Nile Virus Infection and Conjunctival Exposure, K. Fonseca et al. http://www.cdc.gov/ncidod/eid/vol11no10/04-0212.htm



# Washington non-human surveillance summary (Reported to DOH as of October 5, 2005)

	Horses* <sup>t</sup>		Birds**		Sentinel FI	Sentinel Flocks***		Mosquito Pools****	
County	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive	
Adams	0	0	1	0	0	0	0	0	
Asotin	0	0	2	0	0	0	0	0	
Benton	1	0	23	0	380	0	277	0	
Chelan	0	0	3	0	0	0	0	0	
Clallam	0	0	3	0	0	0	0	0	
Clark	1	0	11	0	0	0	35	0	
Columbia	0	0	0	0	0	0	0	0	
Cowlitz	0	0	7	0	0	0	26	0	
Douglas	0	0	1	0	0	0	0	0	
Ferry	0	0	2	0	0	0	0	0	
Franklin	0	0	2	0	0	0	71	0	
Garfield	0	0	0	0	0	0	0	0	
Grant	1	0	2	0	0	0	0	0	
Grays Harbor	0	0	8	0	0	0	0	0	
Island	1	0	41	0	0	0	0	0	
Jefferson	0	0	10	0	0	0	14	0	
King	2	0	99	0	0	0	1	0	
Kitsap	0	0	0	0	0	0	110	0	
Kittitas	0	0	8	0	0	0	0	0	
Klickitat	1	0	4	0	0	0	0	0	
Lewis	0	0	18	0	0	0	0	0	
Lincoln	0	0	0	0	0	0	0	0	
Mason	0	0	20	0	0	0	0	0	
Okanogan	0	0	2	0	0	0	0	0	
Pacific	0	0	1	0	0	0	0	0	
Pend Oreille	1	0	0	0	0	0	0	0	
Pierce	0	0	97	0	0	0	81	0	
San Juan	1	0	2	0	0	0	0	0	
Skagit	1	0	12	0	0	0	0	0	
Skamania	0	0	1	0	0	0	0	0	
Snohomish	6	0	54	0	0	0	9	0	
Spokane	2	0	18	0	0	0	0	0	
Stevens	3	0	5	0	0	0	0	0	
Thurston	0	0	78	0	0	0	0	0	
Wahkiakum	0	0	0	0	0	0	0	0	
Walla Walla	1	0	8	0	0	0	0	0	
Whatcom	1	0	13	0	0	0	0	0	
Whitman	1	0	6	0	0	0	0	0	
Yakima	2	1	16	1	100	0	228	2	
Totals	26	1	578	1	480	0	852	2	

<sup>\*</sup>A total of 34 horses have been tested for West Nile virus. Eight were not included in the table because county/state information was not available. WADDL Report Dated: August 31, 2005. 

<sup>t</sup>WNV positive acquired in state.

<sup>\*\*</sup>A total of 593 birds have been submitted for West virus testing of which 15 birds were unsuitable and not tested for West Nile virus. USGS Report Date: September 20, 2005 and WADDL Report Date: October 3, 2005 \*\*\*Benton County MCD Report Dated: September 27, 2005

<sup>\*\*\*\*</sup> Mosquito pools tested by USACHPPM-West Report Date: September 30, 2005 (Week #30), Cowlitz County MCD Report Date: August 25, 2005, Benton MCD Report Date: September 27, 2005, Franklin MCD Report Date: August 24, 2005, Clark MCD Report Date: September 12, 2005, and WADDL Report Date: September 7, 2005.